

AMENDMENT TO THE SPECIFICATION

Please replace the paragraph beginning on page 7, line 12 and ending on page 7, line 19 with the following paragraph:

Flow sensor 10 can be electrically coupled via leads 14 to control system 16 or to other processing electronics. Such electrical coupling may occur over two-wire control loop ~~(not—shown)~~14, a wireless communication link, or via any communication means. Control system 16 is typically remotely located in a control room 18 of the processing plant. Alternatively, control system 16 may be distributed such that the control system 16 exists in more than one location (control room 18 shown in phantom).

Please replace the paragraph beginning on page 7, line 20 and ending on page 7, line 23 with the following paragraph:

Control system 16 can be configured to monitor flow-related information received from the flow sensor 10 and/or to control the flow sensor 10 via the communications link.

Please replace the paragraph beginning on page 8, line 19 and ending on page 9, line 2 with the following paragraph:

Though it is difficult to see the details of the embodiment shows in FIG. 1, the sensor element flow sensor 10 is comprised of two annular capacitive sensor rings, connected by a flow restrictive segment 20 (pressure dropping element) to the pipe 12 via flanges 22. The flanges 22 of the pipe 12 and the flow restrictive segment 20 are connected using a fastening element 26. The fastening element 26 may be any fastening means, such as rivets, bolts, screws and nuts, and the like. In a preferred embodiment, the fastening

element 26 is threadably attached through openings on the flange 22 of the restrictive segment 20 and through corresponding openings provided on the flange 22 of the pipe segment 12, such as with a bolt and a nut.

Please replace the paragraph beginning on page 20, line 29 and ending on page 21, line 8 with the following paragraph:

Referring again to FIG. 1, differential pressure flow sensor 10 measures the pressure drop across flow restriction member 20 by coupling capacitive pressure sensors 28 to the pressures on both sides of the flow restrictive element 21. In general, the Differential pressure flow sensor 10 produces a pressure signal, which is indicative of the pressure drop across the restrictive element 21 and which can be provided to processing electronics to calculate the flow rate of the fluid flow.

Please replace the paragraph beginning on page 21, line 9 and ending on page 21, line 13 with the following paragraph:

Since the flow sensor 10 of the present invention does not use impulse lines or fill fluid, the flow sensor 10 is insensitive to position. As a result, this embodiment of differential pressure flow sensor 10 can be moved without having to recalibrate.